

I CLAIM:

1. A multi-nozzle assembly comprising:
a first nozzle configured to extrude material through a first outlet;
a second nozzle configured to extrude material through a second outlet;
and
a third nozzle configured to extrude material through a third outlet, the third outlet being between the first and second outlets.
2. The multi-nozzle assembly of claim 1 wherein each outlet has a substantially rectangular cross-section.
3. The multi-nozzle assembly of claim 1 further including a nozzle position controller configured to controllably vary the height of at least one of the outlets with respect to the height of at least one of the other outlets.
4. The multi-nozzle assembly of claim 1 further including a first and second trowel configured to shape material extruded from the first and second nozzles, respectively.
5. The multi-nozzle assembly of claim 1 wherein the width of the first and the second outlet is less than the width of the third outlet.
6. The multi-nozzle assembly of claim 1 further including an orientation-control mechanism configured to control the orientation of the multi-nozzle assembly.
7. The multi-nozzle assembly of claim 6 wherein the orientation-control mechanism is configured to control the orientation of the multi-nozzle assembly in three dimensions.
8. The multi-nozzle assembly of claim 1 further including a material feed system configured to feed material to each nozzle.
9. The multi-nozzle assembly of claim 8 wherein the material feed system is configured to keep the material that is fed to the first and second nozzles separate from the material that is fed to the third nozzle.

10. The multi-nozzle assembly of claim 8 wherein the material feed system includes a valve system configured to selectably cut off the flow of material to each of the nozzles in a controllable manner.

11. The multi-nozzle assembly of claim 1 further including a controllable gate configured to controllably block material extruded from at least one of the nozzles from flowing in one direction.

12. A construction method comprising:

simultaneously extruding a first layer of two, spaced apart rims; and

after extruding the first layer of rims, simultaneously extruding a further, layer of two, spaced apart rims, each directly or indirectly on top of the first layer of one of the spaced apart rims, along with a first layer of filler between the first layer of two, spaced apart rims.

13. The construction method of claim 12 wherein the height of the first layer of rims and the first layer of filler are all substantially the same.

14. The construction method of claim 12 wherein the material used for the rims is different than the material used for the filler.

15. The construction method of claim 14 wherein the material used for the rims is plastic and the material used for the filler is concrete.

16. The construction method or claim 12 wherein the first layer of rims is permitted to cure before extruding the further layer of rims and the first layer of filler.

17. The construction method of claim 12 further including, after extruding the further layer of rims, extruding a further layer of filler on top of the last extruded layer of filler without also simultaneously extruding a further layer of rims.

18. A wall comprising:

a set of spaced apart rims, each comprised of a stacked set of separately-extruded layers; and

a filler between the rims comprised of a stacked set of separately-extruded layers.

19. The wall of claim 18 wherein the rims are made of a material that is different than the filler.

20. The wall of claim 19 wherein the rims are made of plastic and the filler is made of concrete.

21. The wall of claim 18 further including one or more rectangular openings within the wall.

22. The wall of claim 18 wherein one of the layers of each rim was extruded at the same time as one of the layers of the filler.

23. The wall of claim 22 wherein the layers of each rim that were extruded at the same time are at a level within the wall that is different than the level of the layer of the filler that was extruded at the same time.